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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,772	07/24/2003	Takuya Uchiyama	1713.1006	7854
21171	7590	05/18/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			WALSH, DANIEL I	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,772

Applicant(s)

UCHIYAMA ET AL.

Examiner

Daniel I. Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7, 15-20 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-7, 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 15, 16 and 25 is/are rejected.
- 7) ☒ Claim(s) 17, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-24-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of the Amendment of 17 February 2005. Claims 2-7, 15-20, and 23-25 are pending. The Examiner appreciates the Applicants good faith effort to respond to the Examiners Action. An action on the pending claims appears below.

Claim Objections

2. Claim 20 is objected to because of the following informalities: Replace "the plane" with -- a plane --. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 25, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crabtree et al. (US 2003/0034887).

Re claim 25, Crabtree et al. teaches a method for detecting the location of a non-contact transceiver comprising performing carrier wave transmission and reception with the non-contact transceiver through antennas and processing signals obtained from the carrier waves received by the antennas and calculating a location of the non-contact transceiver (FIG. 1, FIG. 3A-3B, and FIG. 5). Though Crabtree et al. teaches an non-contact transceiver and not specifically an non-contact IC card, the transceiver of Crabtree et al. is disclosed as having a microprocessor (paragraph [0074]) and memory (paragraph [0071]). The Examiner notes that though Crabtree et al. does not teach the form factor of a card, the Examiner notes that such modification would have been a matter of design variation. As the transceiver is able to be attached to different items for location, it would have been well within the skill in the art to pick a respective form factor to provide for convenience, ease of use, aesthetics, etc. based upon the application of the system (see Tuttle US 6,509,829 for use of a card, as an example).

Re claim 15, Crabtree et al. teaches that a plurality of antennas (70) are used to locate the transceiver, and that based on the signal strength, an appropriate antenna is selected for calculating the location in the most accurate form. Therefore, the Examiner broadly interprets measuring the signal strength as a means of using a measurable level of the signal to locate the transceiver. Though silent to specifically the use of a voltage, the Examiner notes that voltage is a well known and common means of measuring a signal strength, and therefore using the voltage as measure of signal strength would have been obvious to one of ordinary skill in the art, as a means to measure the signal.

Re claim 16, Crabtree et al. teaches alternately driving the antennas to locate the transceiver (paragraph [0102]).

Allowable Subject Matter

4. Claims 2-7, 23, and 24 are allowed.
5. Claims 17, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: Re claims 2-6, 7, 23, and 24 the prior art of record fails to teach a non contact reader/writer that calculates the location of the card. While the Examiner notes that it is well known and conventional in the art to read RFID tags, cards, transponders, etc., where the cards are detected and the location of the card is therefore known based on where the card was detected or by what sensor it was detected by, the prior art of record fails to teach a card reader and writer device that does so, while also providing for calculating the location of the card. Mere detection of a card, tag, transponder, etc. in an area/brought into a detection area does not amount to calculating a location of the card. The prior art to Suga et al. (US 6,427,065) teaches that the further away from a card reader/writer that a card is, the lower the induced voltage in the card is, and Suga et al. therefore teaches a means to reconcile the induced voltage to maintain a desirable voltage in the card. Suga et al. recognizes the dependence of the voltage on distance (FIG. 3), and though the voltages changes based on distance, Suga et al. is silent to calculating a card location, as Suga merely compensates the voltage levels based on the distance (not location). The prior art to

d'Hont (US 5,619,207) teaches a balanced receive antenna circuit, but d'Hont is drawn to detection of a transponder only. Incorporating it with a non contact IC card read/writer is not obvious to the Examiner. Similarly, Luc (US 6,473,028) teaches a method for determining whether a transponder is within a given distance/area of a read/write unit, but again does not calculate a location, but merely whether it is close enough to the read/write unit.

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Von Der Lippe et al. (US 6,629,637), D'Hont (US 5,619,207 and US 5,594,448), Moore (US 2003/0001726), Yamaguchi (US 5,432,328), Ferrier et al. (US 2003/0058107), Lu et al. (US 6,686,881), Tuttle (US 6,127,917), Suga et al. (US 6,427,065), Castelloni et al. (US 5,714,932), Caronni et al. (US 2004/0203846), Brady et al. (US 6,204,765), Degrauwe et al. (US 2001/0028302), Werb et al. (US 6,456,239), Reis et al. (US 5,686,902), Yamaguchi (US 5,698,838), Saitoh et al. (US 5,804,811), Heinrich et al. (US 2005/00880286 and US 2002/0118097), Salim et al. (US 2004/0113791), Nicholson (US 2002/0130778), Fujimoto (US 2004/0140906), Werb (US 6,483,427), and Luc (US 6,473,028).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh
Examiner
Art Unit 2876
5-5-05

A handwritten signature in black ink, appearing to read 'D. I. Walsh', is written over the printed name and date.